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ABSTRACT

This guide presents a model developed to assist schools and districts in planning and implementing multicultural and nonsexist education in all subject areas from kindergarten to twelfth grade. The guide illustrates how multicultural/nonsexist curricula may be integrated into social studies, mathematics, language arts, and science, and emphasizes that the model is applicable in other subject areas as well. Four sequential activities for curriculum development are proposed: deciding on a rationale; selecting goals and outcomes; assessing content; and developing appropriate activities. Activities are described and materials and worksheets for each of the four subject areas represented are provided. A bibliography is appended. (Author/MJL)

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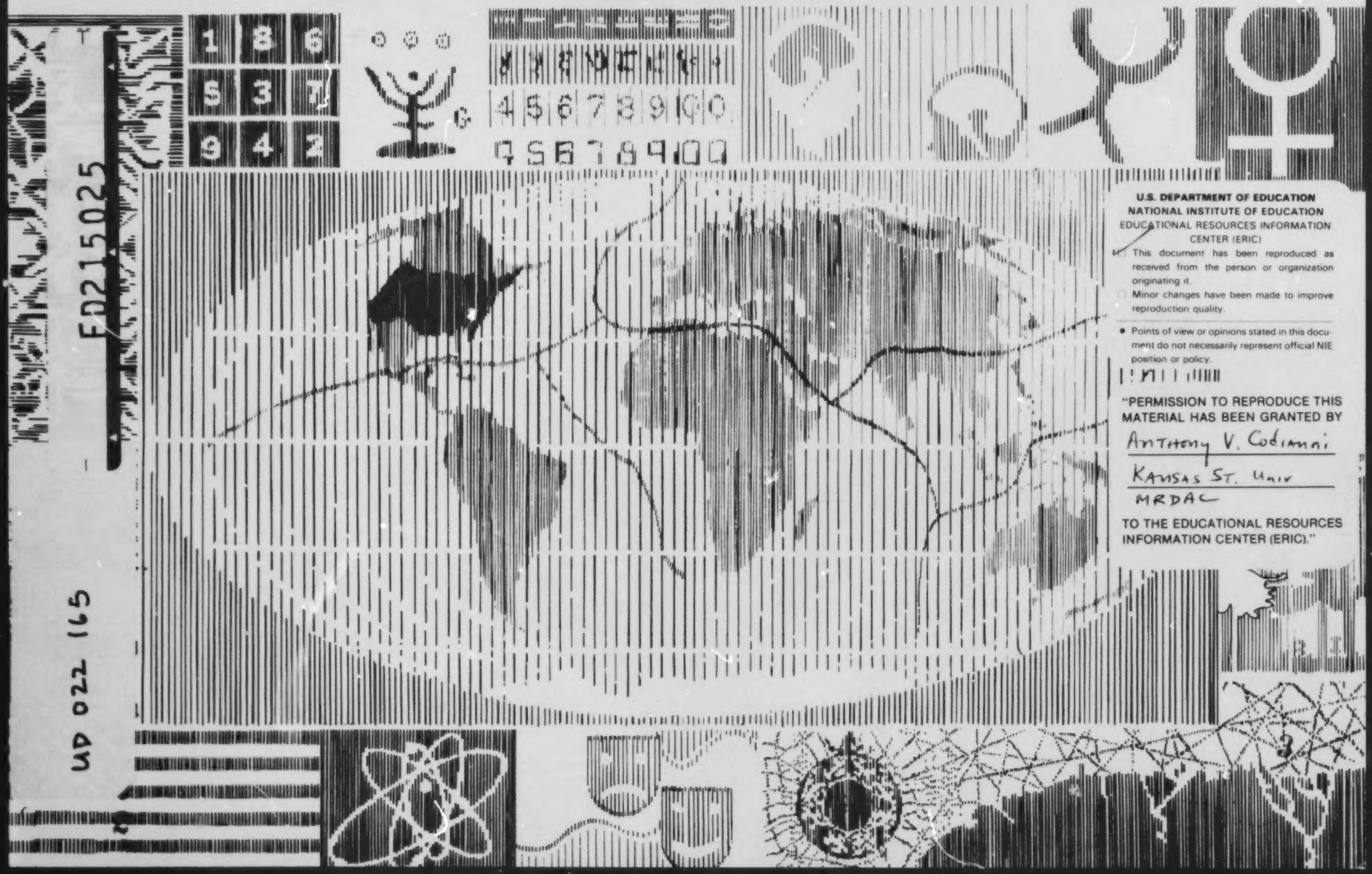
TOWARD EDUCATIONAL EQUITY FOR ALL:

A Planning Guide for Integrating Multicultural/Nonsexist Education Into the K-12 Curriculum



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Toward Educational Equity for All:

A Planning Guide for Integrating Multicultural/Nonsexist Education Into the K-12 Curriculum

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October 1981

In Conjunction with
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Preface

The 1960s and 1970s brought a new and dynamic challenge to American education. Members of groups whose histories and cultures had been omitted from or distorted within the mainstream curriculum began to request, sometimes demand, valid curricular inclusion. First Blacks, then Hispanics, Native Americans and Asian Americans, called for reform. Then came the New Pluralism, with America's White ethnic groups appealing for the educational inclusion of their stories. Cutting across all racial, ethnic and mainstream American groups were women, who rightfully pointed out both how their contributions had been omitted from curricula and how educational materials had become mired by the pervasive use of sexist language. The process of school desegregation, bringing together ethnically and culturally diverse students, magnified the imperative for a curriculum which dealt more accurately with American diversity and helped prepare young people for life in our increasingly diverse society.

The time for change had come. But how? Given the impetus of desegregation, group protests and the resulting growth of consciousness, educators responded in various ways. Schools held ethnic festivals, serving ethnic foods and displaying pictures and posters of famous women and ethnics. Individual teachers began to develop classroom strategies, usually involving special units on women and ethnic groups. Publishers began to flood the market with supplementary materials focusing on women and ethnics, and started to integrate ethnic and women's perspectives into basic textbooks, although this effort seldom went beyond tokenism and superficiality. Some school districts made commitments to multiculturalize and remove sexist elements from their curricula, although to date there generally has been a huge gap between commitment and implementation. Increasingly, state departments of education have called for, and in some cases mandated, such changes. Yet, measured against multicultural/nonsexist ideals, curricular realities still remain deficient.

The ideal-reality gap occurred despite the best intentions of thousands of individual teachers, districts, materials developers and state departments of education. It occurred for many reasons—far too many to discuss here. But among the primary reasons was the absence of a holistic view of multicultural/nonsexist education, a view which incorporated and integrated multicultural/nonsexist thinking and teaching throughout the entire kindergarten-through-twelfth-grade curriculum. While individual parts—teachers, courses, schools, administrators and materials—might have been of high quality, the lack of both a holistic concept of multicultural/nonsexist education and a consistent integration throughout the curriculum meant that the educational sum—student progress—usually fell far short of the total of its often excellent individual parts.

The Midwest Race and Sex Desegregation Assistance Centers (MRSDAC) recognized the need to bridge this discrepancy between parts and sum. The impetus for action came from various sources. It came from the vast experience of the MRSDAC staff as it worked

with school districts throughout Iowa, Kansas, Missouri and Nebraska. It came from the appeals of desegregating schools and districts for MRSDAC to provide curricular leadership and assistance in meeting the needs of their changing student populations. It came from the thoughtful recognition by ethnically homogeneous schools and districts that, desegregation or no desegregation, all of their students ultimately would become functioning citizens in a diverse nation and rapidly shrinking world. Finally, it came from the Iowa Department of Public Instruction which, in August of 1979, issued a mandate that each Iowa school district develop a five-year plan for integrating continuous multicultural/nonsexist education into all subject areas and into all grade levels (kindergarten through twelfth grade).

MRSDAC perceived the basic need for a planning document which could help any school district determine its own multicultural/nonsexist goals, decide how to integrate these goals into the various curricular areas and identify the types of materials and teaching strategies which would help students progress toward these goals. To create such a document, MRSDAC formed *The National Task Force on Multicultural/Nonsexist Education,* composed of 22 carefully selected experts who had been involved deeply in both multicultural/nonsexist education and in four selected target subject areas—language arts, mathematics, science and social studies. The task force convened at Kansas State University, Manhattan, Kan., on May 15-17, 1980, to prepare the preliminary draft of the planning document.

MRSDAC divided the task force into four teams: Mathematics, Language Arts, Social Studies and Science. Each team included elementary- and secondary-level content-area experts, specialists on multicultural and nonsexist education and representatives from the four-state region. Each team received four specific charges: to develop examples of various rationales for integrating a multicultural/nonsexist approach into the target subject area; to determine the range of possible multicultural/nonsexist goals and outcomes within the target subject area; to identify subject content for each grade level and suggest a way to infuse a multicultural/nonsexist perspective into each grade-level content; and to suggest a range of teaching activities which would integrate multicultural/nonsexist approaches into the identified subject areas.

During the intensive three-day meeting, task force members alternated between team meetings, sharing individual team results and critiques. Based on the materials generated at the meeting, MRSDAC members, with the assistance of Bruce Tipple and Carlos Cortés, assembled, synthesized and provided final structure for the following planning document: *Toward Educational Equity for All: A Planning Guide for Integrating Multicultural/Nonsexist Education Into the K-12 Curriculum.* It is the hope of all—MRSDAC staff and task force members alike—that this document will help districts in the four-state region as well as throughout the United States, to shape a curriculum which more effectively helps young people learn to lead sensitive, constructive, clear-thinking lives of interethnic and nonsexist understanding.

Anthony V. Codianni

Acknowledgments

The Midwest Race and Sex Desegregation Assistance Centers (MRSDAC) acknowledge the following members of *The National Task Force on Multicultural/Nonsexist Education* (MC/NS) for contributing to the development of this guide:

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Glossary

Multicultural education: The educational processes which promote the understanding and appreciation of the cultural diversity of our pluralistic society by providing students with the necessary knowledge, skills and attitudes to function positively and productively within a pluralistic society. The educational programs should provide equal opportunity for all participants regardless of race, sex, age, national origin, religion, socio-economic background or handicap.

Nonsexist education: The educational processes which foster the knowledge of and respect and appreciation for the historical and contemporary contributions of men and women to society. Also, those educational processes that reflect the wide variety of roles open to both men and women. The educational programs shall provide equal opportunity for both sexes.

MC/NS: An abbreviated term for multicultural/nonsexist that is used throughout this document.

Program: The total processes, methods, content and materials used in the teaching/learning experience.

Rationale: A philosophy or a series of statements explaining the reasons or bases for the program.

Goals, outcomes and objectives: Statements which can be thought of in terms of three levels of specificity. The most general level is goals, the next level, outcomes and the third level, objectives.

Goals: General statements which relate closely to the rationale and identify what should be done in the program: provide directions for the program.

Outcomes: Statements which define more clearly expectations for students. These lend themselves to measurement and thus, form the base for an accountable program.

Objectives: (Although this term is not used in the document, it is included to clarify other terms.) Specific statements which are appropriate for a grade level and course. Most commonly referred to as "instructional objectives" or "behavioral objectives." In many cases, these are developed for daily use by teachers.

Subject area: Social studies, mathematics, language arts and/or science.

Content: The concepts, processes, facts and values taught in the subject area.

CULTURAL: Refers to differences in race, ethnicity, sex, social or economic background, age, religion and physical and mental capabilities.

Introduction

Toward Educational Equity for All: A Planning Guide for Integrating Multicultural/Nonsexist Education Into the K-12 Curriculum is an action document. Its purpose is to assist schools and districts in planning and implementing effective multicultural/nonsexist education throughout all subject areas from kindergarten through twelfth grade. For purposes of illustration, this document concentrates on four subject areas: social studies, mathematics, language arts and science. This action model also should be used by districts to integrate multicultural/nonsexist education into other traditional areas such as art, music, home economics and physical education, as well as into such innovative programs as career education, law-related education, global education, environmental education and citizenship education.

This planning guide contains four sequential activities with corresponding worksheets:

I. **Deciding on a Multicultural/Nonsexist Rationale**—an activity to help districts and schools develop a rationale for each of the four subject areas.

II. **Selecting Multicultural/Nonsexist Goals and Outcomes in Subject Areas**—a four-step activity to help districts and schools:
   a. determine long-range knowledge, skill and attitude goals which fulfill the selected rationales for each of the four subject areas;
   b. identify short-range knowledge, skill and attitude outcomes which fulfill the determined goals and contribute to student progress toward each of the long-range goals;
   c. develop a logical sequence for the outcomes identified in step "b" which are appropriate for each grade level (or groupings of grades);
   d. cluster grade-level outcomes in each subject area to establish a set of outcomes by grade level.

III. **Assessing Content in a Multicultural/Nonsexist Program**—an activity through which districts and schools can:
   a. compare the desired grade-level outcomes selected for each subject area with current curriculum content;
   b. identify where current content does not exist to meet MC/NS outcomes.

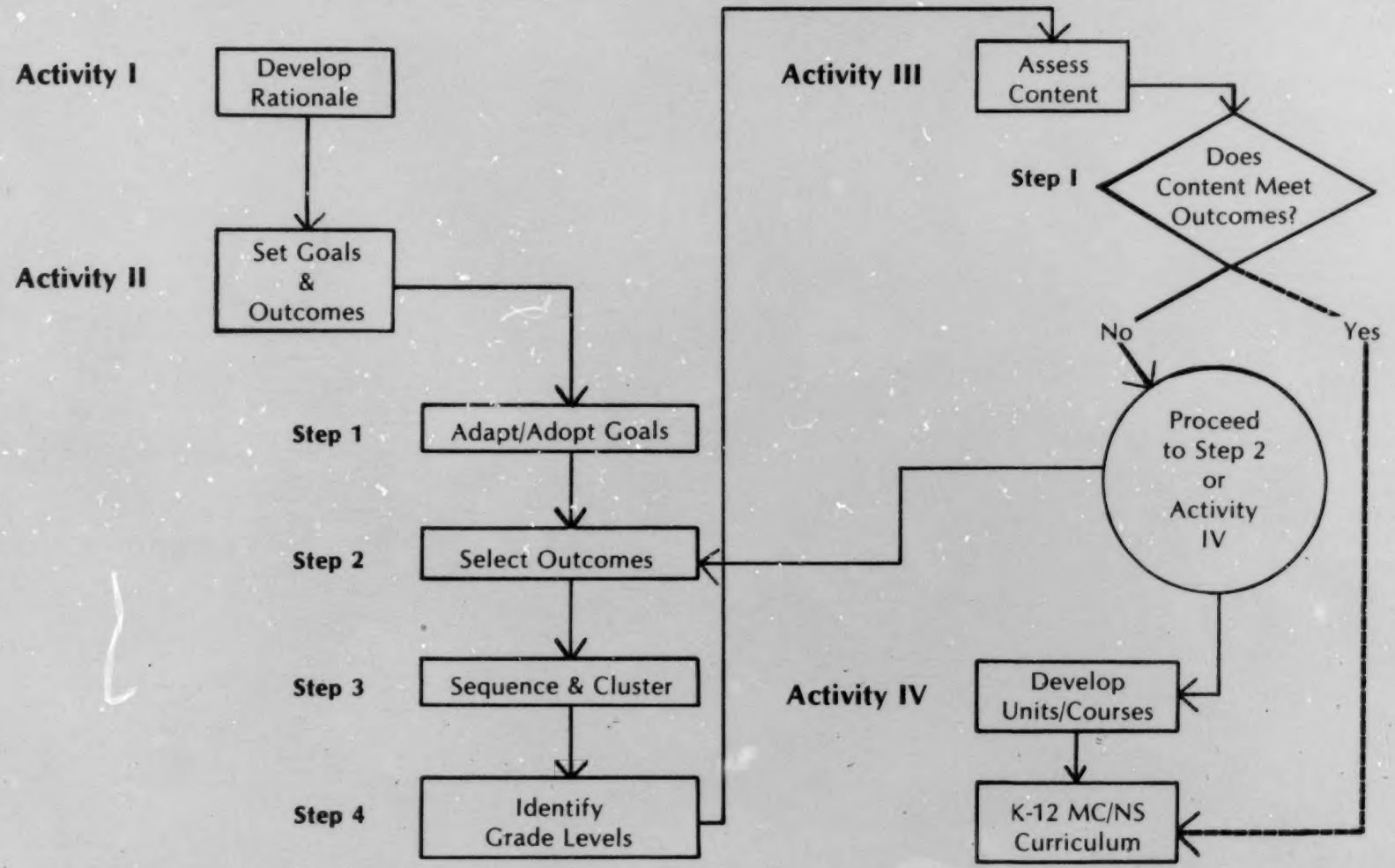
IV. **Developing Appropriate Multicultural/Nonsexist Activities**—an activity to assist schools and districts in examining the wide range of classroom activities through which teachers can help students make progress toward the desired goals and outcomes.

Each of these four activities is described briefly in the text and followed by subject area materials and worksheets for: social studies, mathematics, language arts and science. Each activity contains appropriate subject area materials as outlined in the Table of Contents.

While a school or district may choose to begin with just one or two subject areas, the development of a truly multicultural/nonsexist curriculum ultimately will include the integration of all four targeted subject areas, as well as other curriculum areas and innovative programs. This approach will insure that multicultural/nonsexist education is infused throughout the entire curriculum as well as pervasive throughout the entire school and district.

In short, this action document can help schools and districts build future bridges from current curricular realities to educational and societal ideals. Desegregation of people is only one step toward the larger quest—the quest for true integration of individuals and groups in society and the creation of better global understanding. Educational equity for all involves helping to prepare all young people for a future of interpersonal and intergroup sisterhood and brotherhood.

K-12 Multicultural/Nonsexist Curriculum Program Plan:



ACTIVITY 1

Deciding on a Multicultural/ Nonsexist Rationale

Background Information

Sound education requires a systematic rationale. Educators should continually review their programs and goals by asking "Why are these important?" Assumptions about students, society and curriculum all should be examined, an effort which by no means is inevitably made. How often are our beliefs and attitudes—the bases of our actions—familiar and comfortable? That human beings resist change is a truism, but it is one upon which educators cannot rest. After all, education is a process of change toward, we hope, the better. To make the process most beneficial to our students, we must be willing to educate ourselves.

The recent past has brought us new methods of instruction, new materials, new students and, almost overwhelmingly, new information. What is student-centered instruction? Should students use calculators? What is the extended family? the metric system? edited American English? And, more pertinent to our aims here, what is multicultural/nonsexist education? The answer to this last question has been debated by many scholars in education. For the purposes of this guide multicultural/nonsexist education is education which provides opportunity and respect for all persons, regardless of race, ethnicity, sex, religion, age, social and economic backgrounds and mental or physical handicap. To offer such education, current curriculum must be revised; a process which proceeds best if we formulate the reasons why it should.

This activity provides statements which either begin or augment a MC/NS rationale. These statements appear in independent sections focusing on social studies, mathematics, language arts and science. Each section presents five rationale perspectives: (1) career preparation, (2) education for citizenship, (3) acquisition of a knowledge base, (4) development of the ability to analyze problems and (5) development of personal identity. These perspectives do not exhaust the rationales for MC/NS education, nor are they mutually exclusive. They merely provide examples to stimulate your thinking about a rationale statement for your own program. We hope you will go beyond these brief statements to formulate the rationale basis of your MC/NS curriculum. Formulating your own rationale will guide you in developing MC/NS goals, course content and learning experiences.

Procedure

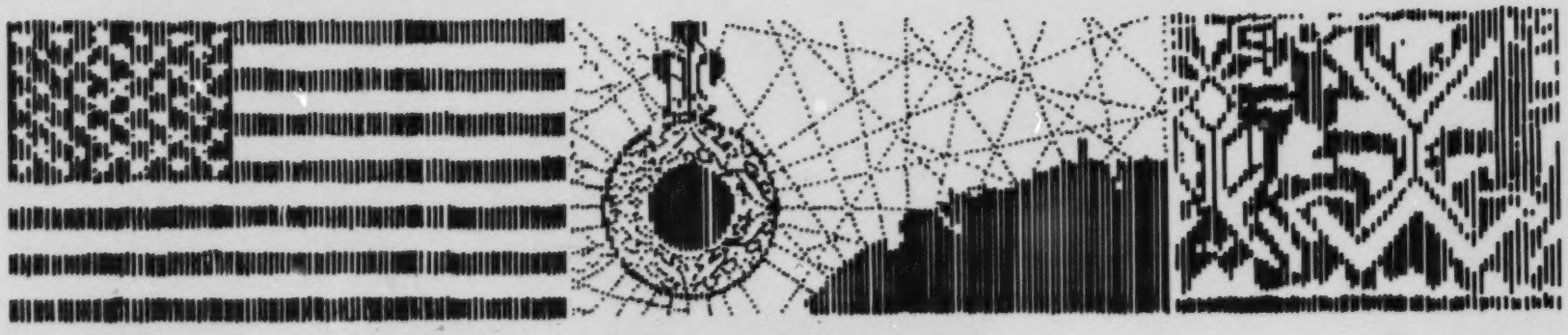
1. Duplicate the five perspectives and the corresponding worksheet(s) in the section for the subject area which your committee has selected. Distribute a copy of each to all participants in your school's (district's) curriculum selection process.

2. After each person has read the five perspectives, have him/her complete section "a" of the worksheet. Then form small groups of not more than five persons. Group members should share their individual responses and reach a consensus about the appropriate perspective for their group. Then, complete section "b" of the worksheet.

3. After the group has discussed and analyzed the areas of agreement and selected, by consensus, the perspective of the group's choice, complete section "c" of the worksheet. Include in section "c" statements taken from the selected rationale, as well as statements of your own which are consistent with the group's perspective. Each group should write as many statements as it can under each of the three categories: (1) assumptions about the nature of society, (2) assumptions about multicultural/nonsexist education and (3) assumptions about the needs of students. An example is provided on the worksheet.

4. This should begin the development of a MC/NS rationale in the subject area selected. To complete the rationale, select a small working group to draft a single rationale statement which reflects the opinions of all members of the groups. The new rationale can and should be read and criticized by the individuals and groups who helped compose it and by others such as principals, central office staff, board members and parents. The criticism may be written or oral and should be considered before agreeing on the final rationale. More than one round of criticism and revision may be necessary to arrive at a rationale acceptable to everyone.

SECTION A



Multicultural/Nonsexist Social Studies Rationales

1. **Career Perspective:** Every student has the right to be economically successful and secure. For students to have equal opportunity to achieve in today's economy, they must have equal training in basic social science skills. Students from all CULTURAL* backgrounds must acquire those skills that will allow them to function constructively and contribute effectively in all situations. They must learn to identify their career goals, plan for their educations and follow a predetermined course in seeking employment. Furthermore, basic social skills will help today's students function more effectively in work settings with co-workers from different CULTURAL backgrounds.
2. **Citizenship Perspective:** In preparing for adult participation in society, students must learn to become effective decision-makers. As such, students must learn to identify, analyze and effectively address problems. In the American and global society today, one of the most pressing problems is inequity directed towards different CULTURAL backgrounds. The job of the social studies program is to develop students who are able and willing to identify, address and participate in the process of reducing these inequities in their everyday lives.
3. **Knowledge Acquisition Perspective:** History is the basis of social studies. Knowledge of the past will help students better understand today's conditions and problems. Students are being raised in a diverse society shaped throughout the years by the contributions of several CULTURAL groups. Therefore, students need to be aware of how their own heritages have helped shape the larger society. In-depth study of the different major CULTURAL groups throughout history will help students shape their own self-concepts and live cooperatively with those who are different from themselves.
4. **Problem Analysis Perspective:** The social sciences provide important concepts, techniques and theories for understanding social reality. These tools should be used by students to analyze the processes and experiences both common to and distinct from individuals of different CULTURAL backgrounds. This is especially important in our pluralistic society, since students will continually interact with people whose backgrounds are different from their own. Studying the social sciences enables students to analyze the similarities and the differences of all people and take effective action to further humane group interaction.
5. **Personal Identity Perspective:** Because social studies deals with "humanness," the major task of a social studies curriculum is to help students develop and appreciate their own identities. Essential to the formation of self-concept is an understanding of and appreciation for different CULTURAL backgrounds. Personal identity is the source of much internal conflict for students. A complex society such as ours offers individuals many identities. That is not a problem; the problem is learning to understand and benefit from multiple identities. Students need criteria for deciding how their multiple identities fit their values and beliefs, and which identities have and do not have meaning. If students understand themselves, they may be able to make wise decisions to mold their own destinies, establish positive relationships with others and contribute to their society. Social studies must develop those knowledge, skill and affective dimensions of students which foster their personal development in a pluralistic society.

*This term is used throughout the document to refer to differences in race, ethnicity, sex, religion, social and economic backgrounds, age and physical and mental abilities.

Worksheet I: A

Developing a Rationale for MC/NS Education in Social Studies

Instructions

a. **Individually**—For each of the perspectives identified, select those with which you strongly agree (SA), agree (A), have no opinion (NO), disagree (D) or strongly disagree (SD):

Career Perspective	SA	A	NO	D	SD
Citizenship Perspective	SA	A	NO	D	SD
Knowledge Acquisition Perspective	SA	A	NO	D	SD
Problem Analysis Perspective	SA	A	NO	D	SD
Personal Identity Perspective	SA	A	NO	D	SD

b. **Small Group**—Identify one of the above rationale statements selected by group consensus. Our group has selected the following perspective for our subject area: _____

_____

c. From the perspective agreed upon, underline those statements in the rationale which indicate the group's feelings about the (1) nature of society, (2) the assumptions about MC/NS education and (3) the assumptions about the needs of students. If these statements are not found in the rationale selected, develop statements which reflect and are consistent with the perspective selected. The following is an example which is not one of the five perspectives, but which was developed to assist in clarifying your task:

Global Perspective: Increasingly, global interrelatedness is a fact of life. Today, the realities of living in a global society are widely proclaimed. There is a growing need for more appropriate educational responses to the shrinking of time and space and the increase in human interactions across national and continental boundaries. Global education should emphasize efforts to bring about changes in content, methods and the social context of education to better prepare students for citizenship in a global age. In order for students to become involved in the world around them, the demands of citizenship in a global age call for the development of competencies that have not been traditionally emphasized in schools. These include cross-cultural communications, effective understanding of political, economic and social diversity for all students regardless of race, sex and national origin, and a global perspective.

Example:

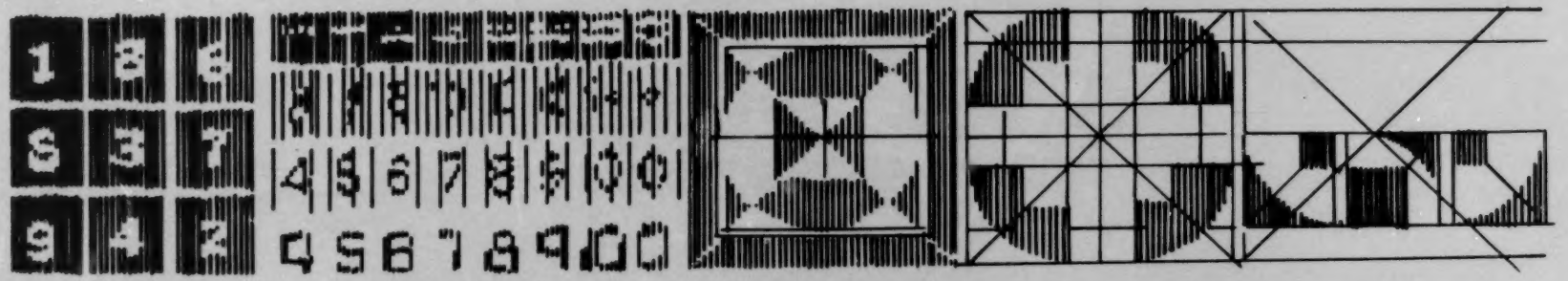
	Statements taken from the rationale	Statements not in the rationale
Assumptions about the nature of society	—global interrelatedness —shrinking time and space —changing	—technological society —human dignity and human rights —cultural relationship —international pluralism
Assumptions about MC/NS education	—communicate across cultural lines —diversity —increase human interactions	—equal opportunity —equal access —equity and parity —egalitarian ideals
Assumptions about the needs of students	—prepare for global citizenship —nontraditional competencies —effective communications across cultural lines	—world mindedness —global mindedness —cultural literacy —interdependency

Chart I:A

Complete the chart using statements from the perspective selected to develop statements of agreement for inclusion in your rationale.

	Statements taken from the rationale	Statements not in the rationale
Assumptions about the nature of society		
Assumptions about MC/NS education		
Assumptions about the needs of students		

SECTION B



Multicultural/Nonsexist Mathematics Rationales

1. **Career Perspective:** In the workplace, the acceptance of competent persons, regardless of CULTURAL backgrounds or physical or mental disabilities is needed to provide ample career opportunities for all individuals. Only then will our work force truly reflect the diversity of our society. Mathematics can assist students to become effective members of the work force by providing career options in mathematics, mathematical sciences and computer sciences. Because of the increase in these math-related careers, mathematics has become even more important in preparing students for the world of work. The failure to elect mathematics courses will seriously limit the career options of high school students. Multicultural/nonsexist mathematics programs should seek to recruit a greater number of students from diverse CULTURAL backgrounds.

2. **Citizenship Perspective:** Our society is becoming more dependent on technology and the application of mathematics and statistics. Math knowledge and skills are important for understanding diverse subjects such as weather prediction and voting behavior. The responsible citizen seeks to inform herself/himself about important social issues and takes appropriate action. A math understanding can improve this information-gathering process. An effective multicultural/nonsexist mathematics program will help students recognize ways in which math can be applied to the real problems and issues of a diverse democratic society.

3. **Knowledge Acquisition Perspective:** Arithmetic, numbers and operations are essential components of everyday life. Facility in the use of mathematical content will enable students of all races, sexes and disabilities to function effectively in a diverse society. People from all CULTURAL backgrounds daily are faced with the need to use the basic math operations—addition, subtraction, multiplication and division. An inability to perform these operations will hinder the individual's success. A multicultural/nonsexist mathematics program should provide students with experiences in using the operations in culturally influenced, everyday settings.

4. **Problem Analysis Perspective:** Mathematics is a live and dynamic discipline. A student's race, sex, culture or physical disability must not be perceived as a deterrent to successful academic and intellectual pursuits. Mathematics is a product of creative, inquiring minds and uses a guided discovery approach for addressing issues and analyzing problems. Students should be able to organize and analyze mathematical information for analyzing problems in everyday living. To insure that students from all CULTURAL backgrounds have an equal opportunity to develop their mathematical skills, a multicultural/nonsexist mathematics program should provide opportunities to apply these skills in a variety of culturally influenced situations.

5. **Personal Identity Perspective:** Culture is the experience which determines our unique humanness. Mathematics has made various contributions to that uniqueness and has enriched and strengthened our worldwide society. Mathematics develops human potential. Young men and women of all racial/cultural groups, and with disabilities, must develop positive self-concepts about their own innate abilities to achieve in mathematics. Doing so will enhance their attitude toward achievement in general. Mastery of math skills also will enable students to progress in other areas, notably the sciences. Besides demonstrating to all students their own untapped aptitudes, mastery of mathematics will show them math's vast range of applications.

Worksheet I: B

Developing a Rationale for MC/NS Education in Mathematics

Instructions

a. **Individually**—For each of the perspectives identified, select those with which you strongly agree (SA), agree (A), have no opinion (NO), disagree (D) or strongly disagree (SD):

Career Perspective	SA	A	NO	D	SD
Citizenship Perspective	SA	A	NO	D	SD
Knowledge Acquisition Perspective	SA	A	NO	D	SD
Problem Analysis Perspective	SA	A	NO	D	SD
Personal Identity Perspective	SA	A	NO	D	SD

b. **Small Group**—Identify one of the above rationale statements selected by group consensus. Our group has selected the following perspective for our subject area: _____

_____

c. From the perspective agreed upon, underline those statements in the rationale which indicate the group's feelings about the (1) nature of society, (2) the assumptions about MC/NS education and (3) the assumptions about the needs of students. If these statements are not found in the rationale selected, develop statements which reflect and are consistent with the perspective selected. The following is an example which is not one of the five perspectives, but which was developed to assist in clarifying your task:

Global Perspective: Increasingly, global interrelatedness is a fact of life. Today, the realities of living in a global society are widely proclaimed. There is a growing need for more appropriate educational responses to the shrinking of time and space and the increase in human interactions across national and continental boundaries. Global education should emphasize efforts to bring about changes in content, methods and the social context of education to better prepare students for citizenship in a global age. In order for students to become involved in the world around them, the demands of citizenship in a global age call for the development of competencies that have not been traditionally emphasized in schools. These include cross-cultural communications, effective understanding of political, economic and social diversity for all students regardless of race, sex and national origin, and a global perspective.

Example:

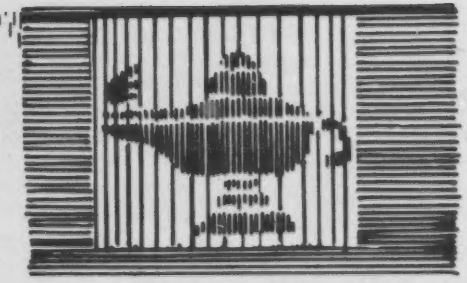
	Statements taken from the rationale	Statements not in the rationale
Assumptions about the nature of society	—global interrelatedness —shrinking time and space —changing	—technological society —human dignity and human rights —cultural relationship —international pluralism
Assumptions about MC/NS education	—communicate across cultural lines —diversity —increase human interactions	—equal opportunity —equal access —equity and parity —egalitarian ideals
Assumptions about the needs of students	—prepare for global citizenship —nontraditional competencies —effective communications across cultural lines	—world mindedness —global mindedness —cultural literacy —interdependency

Chart I:B

Complete the chart using statements from the perspective selected to develop statements of agreement for inclusion in your rationale.

	Statements taken from the rationale	Statements not in the rationale
Assumptions about the nature of society		
Assumptions about MC/NS education		
Assumptions about the needs of students		

SECTION C



Multicultural/Nonsexist Language Arts Rationales

1. **Career Perspective:** Vocational success requires the ability to communicate effectively. No person should be ignored in the cultivation of this ability. A language arts curriculum should help students from all CULTURAL backgrounds develop and practice communication skills which will enhance their career opportunities.
2. **Citizenship Perspective:** The multicultural/nonsexist language arts curriculum includes carefully planned and systematic teaching that enables students to acquire the knowledge, skills and attitudes to listen effectively, articulate ideas, read with facility and comprehension, and convey ideas in writing in constructive and sensitive ways which consider the diverse style of the world in regards to CULTURAL diversity. For our democratic system to function properly, each citizen must be able to interact effectively with others. The skills mentioned above will facilitate that interaction. Since our society is composed of so many diverse groups, a good citizen will need to apply these skills in a number of culturally influenced situations. Effective communication is indeed the basis of effective democratic government.
3. **Knowledge Acquisition Perspective:** Language is varied and complex. It easily can, and too often does, control its users. The relation of language and reality also is complex. The multicultural/nonsexist language arts curriculum should help students develop conscious and informed control over language for living effectively, constructively and sensitively—in relation both to oneself and to others—in a nation and a world of diversity. The program should use fiction, poetry, drama and formal prose to represent a variety of CULTURAL backgrounds. Such a variety of language samples will help students understand the influence of CULTURAL factors on the use of language in our society, and the influence of language on culture. The samples also will enable students to appreciate better the experiences of various groups in our society and their contributions to our heritage.
4. **Problem Analysis Perspective:** Language, a system of symbols, makes the images which fill our minds more concrete. A person may represent ideas with words to find a new relationship among those ideas. We call those new relations decisions, answers, solutions or judgments. To instill sound judgment, the multicultural/nonsexist curriculum should teach critical reading, thinking and writing. Only if students develop those abilities can they intelligently face serious issues. This need for intelligence is especially acute in our pluralistic society because CULTURAL differences have for so long been considered "wrong." Everyone makes many decisions during their lives that affect others as well as themselves. To insure that students will be conscious of the bases and effects of their choices, the curriculum should provide realistic experiences in addressing problems from a multicultural/nonsexist perspective.
5. **Personal Identity Perspective:** A multicultural/nonsexist language arts curriculum should be designed to develop observing, thinking, feeling and creative human beings who can live effectively, constructively and sensitively—in relation both to themselves and to others—in a nation and a world of diversity. Inherent in this curriculum should be experiences, opportunities and alternatives in listening, speaking, reading and writing through which students can learn in ways suitable to their needs and mode. Each student's self-identity is related to her/his CULTURAL heritage. To feel secure in her/his identity, the student must learn about the CULTURAL heritage and how it has contributed to our society. Furthermore, because the United States is composed of various interacting groups, students must learn to relate to individuals who are members of their own groups as well as those who are members of other groups. Prejudice and discrimination are barriers which must be eradicated before effective interaction can occur.

Worksheet I: C

Developing a Rationale for MC/NS Education in Language Arts

Instructions

a. **Individually**—For each of the perspectives identified, select those with which you strongly agree (SA), agree (A), have no opinion (NO), disagree (D) or strongly disagree (SD):

Career Perspective	SA	A	NO	D	SD
Citizenship Perspective	SA	A	NO	D	SD
Knowledge Acquisition Perspective	SA	A	NO	D	SD
Problem Analysis Perspective	SA	A	NO	D	SD
Personal Identity Perspective	SA	A	NO	D	SD

b. **Small Group**—Identify one of the above rationale statements selected by group consensus. Our group has selected the following perspective for our subject area: _____

_____

c. From the perspective agreed upon, underline those statements in the rationale which indicate the group's feelings about the (1) nature of society, (2) the assumptions about MC/NS education and (3) the assumptions about the needs of students. If these statements are not found in the rationale selected, develop statements which reflect and are consistent with the perspective selected. The following is an example which is not one of the five perspectives, but which was developed to assist in clarifying your task:

Global Perspective: Increasingly, global interrelatedness is a fact of life. Today, the realities of living in a global society are widely proclaimed. There is a growing need for more appropriate educational responses to the shrinking of time and space and the increase in human interactions across national and continental boundaries. Global education should emphasize efforts to bring about changes in content, methods and the social context of education to better prepare students for citizenship in a global age. In order for students to become involved in the world around them, the demands of citizenship in a global age call for the development of competencies that have not been traditionally emphasized in schools. These include cross-cultural communications, effective understanding of political, economic and social diversity for all students regardless of race, sex and national origin, and a global perspective.

Example:

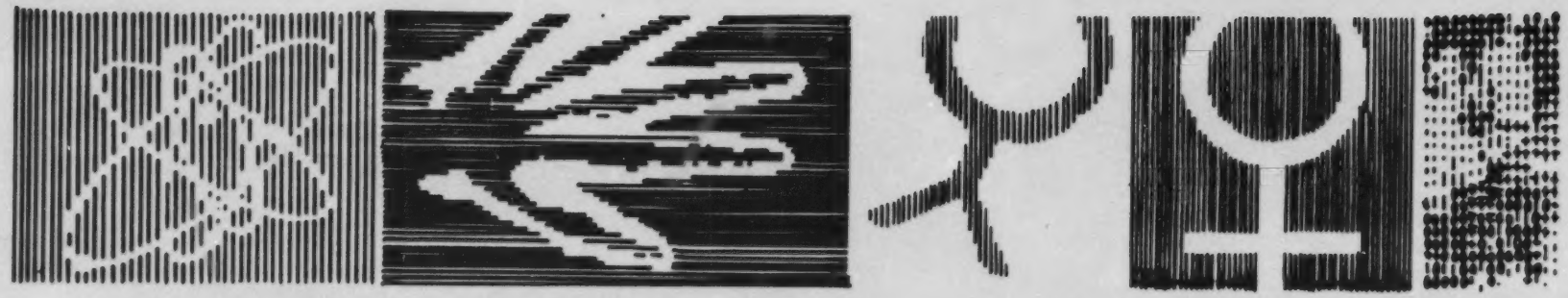
	Statements taken from the rationale	Statements not in the rationale
Assumptions about the nature of society	—global interrelatedness —shrinking time and space —changing	—technological society —human dignity and human rights —cultural relationship —international pluralism
Assumptions about MC/NS education	—communicate across cultural lines —diversity —increase human interactions	—equal opportunity —equal access —equity and parity —egalitarian ideals
Assumptions about the needs of students	—prepare for global citizenship —nontraditional competencies —effective communications across cultural lines	—world mindedness —global mindedness —cultural literacy —interdependency

Chart I:C

Complete the chart using statements from the perspective selected to develop statements of agreement for inclusion in your rationale.

	Statements taken from the rationale	Statements not in the rationale
Assumptions about the nature of society		
Assumptions about MC/NS education		
Assumptions about the needs of students		

SECTION D



Multicultural/Nonsexist Science Rationales

1. **Career Perspective:** Our economic system is becoming increasingly dependent on complex technological systems. Employers, therefore, are demanding more scientific and technical training for entry-level positions. Our educational system must insure that all students have equal access to training which could enhance their employment opportunities. Students from all CULTURAL groups should be made aware of careers in science and technology which are available in our economic system. In addition, education in science should reinforce basic math, reading and language arts skills which will improve further employment opportunities.
2. **Citizenship Perspective:** Our students will become consumers, producers and voters in the most technically complex society the world has ever known. Because of the growth in technology and the exchange in technology between nations of the world, students must learn to work effectively with people from many different backgrounds. The impact science has on people of diverse backgrounds should be understood by all students for good citizenship. Furthermore, members of all CULTURAL groups should understand the process of scientific investigation. Such an awareness will facilitate equitable participation of all groups in our nation's social, economic and political systems.
3. **Knowledge Acquisition Perspective:** The biological and natural sciences have produced knowledge which has helped human society grow and prosper. These sciences are important to all CULTURAL groups in our society. Properly applied, these sciences will improve the standard of living of all individuals and groups in American society. Science education should demonstrate ways in which the scientific community has drawn on both experiments and findings from many different societies. Also, it should show how individuals from many different groups have furthered scientific understanding. Multicultural/nonsexist education should insure that students from all CULTURAL backgrounds develop a basic level of scientific literacy. Teaching basic scientific principles and concepts to all students, therefore, insures educational equity.
4. **Problem Analysis Perspective:** Just as students from all CULTURAL groups should learn what science has added to our understanding of diversity, so they should be introduced to the processes by which this understanding has emerged. Observation, classification, concept formation, experimentation, validation—these are the processes of science. All students should know what they are and how to use them. And they should be encouraged to think about the implications of our culture's commitment to these methods. The development of rational thought processes which emerge from effective science education will help students view others from a more objective, less prejudicial, perspective. They will reject common stereotypes and be more open to experiences and empirical data which contradicts these stereotypes.
5. **Personal Identity Perspective:** As society becomes more complex, individuals tend to lose their sense of identity. They often feel that they no longer have control over their own destinies. Science education should seek to reinforce the importance of the individual in directing and controlling the technical system. It also should help the individual recognize the importance of science in his/her daily life. Each student, regardless of CULTURAL background, should be able to develop a sense of efficacy in dealing with the natural world and with the technical system. The individual's self-image will be enhanced by this important outcome of science education.

Worksheet I: D

Developing a Rationale for MC/NS Education in Science

Instructions

a. **Individually**—For each of the perspectives identified, select those with which you strongly agree (SA), agree (A), have no opinion (NO), disagree (D) or strongly disagree (SD):

Career Perspective	SA	A	NO	D	SD
Citizenship Perspective	SA	A	NO	D	SD
Knowledge Acquisition Perspective	SA	A	NO	D	SD
Problem Analysis Perspective	SA	A	NO	D	SD
Personal Identity Perspective	SA	A	NO	D	SD

b. **Small Group**—Identify one of the above rationale statements selected by group consensus. Our group has selected the following perspective for our subject area: _____

_____

c. From the perspective agreed upon, underline those statements in the rationale which indicate the group's feelings about the (1) nature of society, (2) the assumptions about MC/NS education and (3) the assumptions about the needs of students. If these statements are not found in the rationale selected, develop statements which reflect and are consistent with the perspective selected. The following is an example which is not one of the five perspectives, but which was developed to assist in clarifying your task:

Global Perspective: Increasingly, global interrelatedness is a fact of life. Today, the realities of living in a global society are widely proclaimed. There is a growing need for more appropriate educational responses to the shrinking of time and space and the increase in human interactions across national and continental boundaries. Global education should emphasize efforts to bring about changes in content, methods and the social context of education to better prepare students for citizenship in a global age. In order for students to become involved in the world around them, the demands of citizenship in a global age call for the development of competencies that have not been traditionally emphasized in schools. These include cross-cultural communications, effective understanding of political, economic and social diversity for all students regardless of race, sex and national origin, and a global perspective.

Example:

	Statements taken from the rationale	Statements not in the rationale
Assumptions about the nature of society	—global interrelatedness —shrinking time and space —changing	—technological society —human dignity and human rights —cultural relationship —international pluralism
Assumptions about MC/NS education	—communicate across cultural lines —diversity —increase human interactions	—equal opportunity —equal access —equity and parity —egalitarian ideals
Assumptions about the needs of students	—prepare for global citizenship —nontraditional competencies —effective communications across cultural lines	—world mindedness —global mindedness —cultural literacy —interdependency

Chart I:D

Complete the chart using statements from the perspective selected to develop statements of agreement for inclusion in your rationale.

	Statements taken from the rationale	Statements not in the rationale
Assumptions about the nature of society		
Assumptions about MC/NS education		
Assumptions about the needs of students		

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ACTIVITY 2

Selecting Multicultural/Nonsexist Goals and Outcomes in Subject Areas

Background Information

After a rationale has been developed, the next step in planning for a comprehensive K-12 multicultural/nonsexist program for a specific subject area, is to identify long-range goals. For each subject area—social studies, mathematics, language arts and science—three goals have been identified. These goals should be part of the entire K-12 education of the student. For each subject area, the task force identified a knowledge, a skill and an attitude goal as well as outcomes needed for accomplishing each goal. The outcomes identified can be accomplished through either a course, a semester or a grade. Most of the outcomes take several years or courses to accomplish.

Procedure

1. a. Read the knowledge, skill and attitude goals for the subject area selected. These goals are listed in Section A, B, C or D following this activity.

   b. Adapt or adopt each of the goal statements which reflect the rationale developed in the previous activity. Goals should be consistent with the philosophy of the district. In some cases, the goals may be shortened, but they should be broad and general in nature and permeate the entire K-12 program.

2. a. Once goals have been selected and/or modified, outcomes needed to achieve these goals also must be selected. The task force has tried to categorize these outcomes under knowledge, skills and attitudes. These lists of outcomes for each subject area are included in Section A, B, C or D following this activity.

   b. The planning group should identify those outcomes essential for accomplishing the goals. In a small group, the participants should read each outcome and reach a consensus as to whether the specific outcome statement is essential for their K-12 subject area. This is done by circling either Strongly Agree (SA), Agree (A), No opinion (NO), Disagree (D) or Strongly Disagree (SD). Next, eliminate the statements which the group has identified as not being essential and add any statements which are needed to accomplish the goal. Only those outcomes which the group has marked SA (Strongly Agree) or A (Agree) should be used for the activities in Steps 3 and 4.

3. a. Now, sequence the essential outcomes identified by the group. Using group consensus, identify at which grade level the outcome should be introduced—Primary (P), Intermediate (I), Junior High (J) or Senior High School (S). Once the outcomes have been sequenced, you are well on your way to planning a comprehensive K-12 multicultural/nonsexist program.

4. a. Once you have sequenced the outcomes, identify at which level each outcome will be reinforced and maintained.

Example:

Step 1	Step 2	Step 3	Step 4
			P I J S
The student communicates what he/she perceives as the characteristics of something which he/she currently is seeing, hearing, tasting, smelling and/or touching (Observing).	(SA) A NO D SD	(P) I J S	I R R M

This example shows that the outcome (Step 1) is essential (Step 2), should be introduced at the primary level (Step 3), reinforced at the intermediate and junior high school levels and maintained throughout the senior high school level (Step 4).

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b. Once all the outcomes have been sequenced and identified, reorder them as follows:
   1. Take all outcomes to be introduced at the primary level and cluster them together.
   2. Take all outcomes to be introduced at the intermediate level and cluster those together.
   3. Take all outcomes to be introduced at the junior high level and cluster them together.
   4. Take all the outcomes introduced at the senior high level and cluster them together.

c. Upon completing this task you should have multicultural/nonsexist outcomes sequentially introduced at the agreed upon grade levels. Your next task is to select content appropriate for each outcome.

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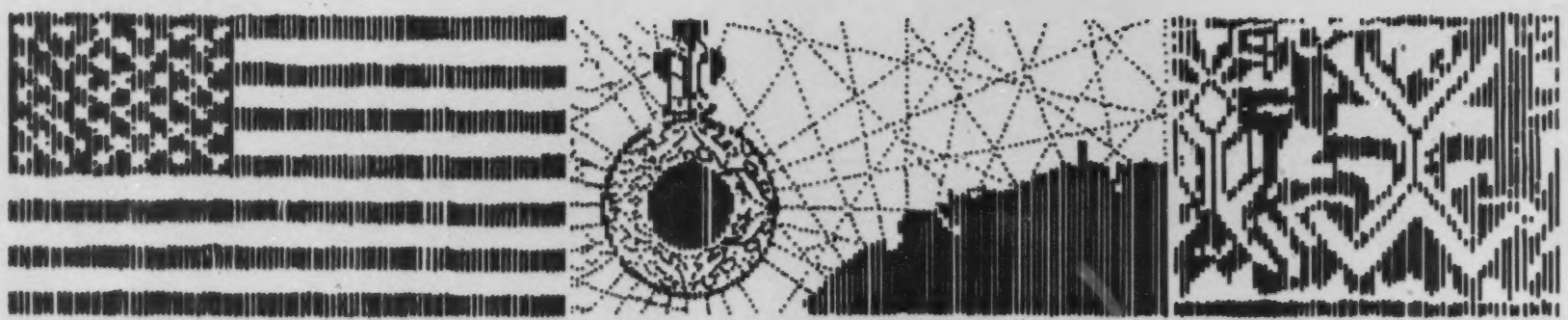
SECTION A



Social Studies Goals and Outcomes

STEP 1	STEP 2	STEP 3	STEP 4			
I. Goal: K-12 Knowledge Understands human behavior in a wide range of environmental contexts (e.g., social, ethnic, racial, cultural, economic and sexual).	Essential for a K-12 Social Studies Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.			
			P	I	J	S
Outcomes						
A. Knows that an infinite range of patterns of human behavior exists. These patterns are influenced by time, place and purpose, and reflect experiences of people/groups from diverse CULTURAL* backgrounds.						
1. Identifies the ways humans are similar and different.	SA A NO D SD	P I J S				
2. Knows the contributions of individuals from various CULTURAL backgrounds to American culture.	SA A NO D SD	P I J S				
3. Compares the positive and negative experiences of individuals and groups from different CULTURAL backgrounds.	SA A NO D SD	P I J S				
4. Understands human diversity, due process and individual and group rights.	SA A NO D SD	P I J S				
5. Demonstrates an understanding of self and self-integration through examining individual beliefs, values and attitudes and the impact that societal and institutional norms have on the formation and maintenance of an individual's beliefs, values and attitudes.	SA A NO D SD	P I J S				
6. Understands the multi-dimensional aspects of ethnic experiences and cultures.	SA A NO D SD	P I J S				
7. Understands the strength in diversity.	SA A NO D SD	P I J S				
B. Acquires knowledge about groups and the organizational and personal implications of such information.						
1. Recognizes that American society is made up of individuals from diverse CULTURAL backgrounds.	SA A NO D SD	P I J S				
2. Understands one's unique individuality by learning how belonging to groups affects it.	SA A NO D SD	P I J S				

*CULTURAL background is used throughout this activity to refer to differences in race, ethnicity, sex, religion, social and economic background, age and physical and mental abilities.

STEP 1	STEP 2	STEP 3	STEP 4
(Knowledge Continued)	Essential for a K-12 Social Studies Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained. P I J S
3. Understands the many groups to which one is a voluntary or involuntary member and recognizes that at various moments one or more of these groups may conflict with one's life.	SA A NO D SD	P I J S	
4. Understands the options related to one's ethnicity and sex.	SA A NO D SD	P I J S	
C. Acquires knowledge about some of the beliefs and values expressed by individuals and groups and recognizes that the times and places in which people live influence their beliefs, values and behaviors.			
1. Identifies values related to individuals from different CULTURAL backgrounds.	SA A NO D SD	P I J S	
2. Understands how diversity is an integral part of American life.	SA A NO D SD	P I J S	
D. Demonstrates knowledge of how beliefs and values are transmitted in various cultures.			
1. Understands nonverbal communication which may relate to specific CULTURAL groups and the effects it has on the group and others.	SA A NO D SD	P I J S	
2. Understands how values and beliefs influence the behavior of individuals and groups.	SA A NO D SD	P I J S	
E. Acquires knowledge about how beliefs and values influence relationships between people.			
1. Recognizes language and behavior which may be offensive to individuals/groups from different CULTURAL backgrounds.	SA A NO D SD	P I J S	
2. Understands the concept of stereotyping and its effects on human beings.	SA A NO D SD	P I J S	
3. Understands such dehumanizing biases as sexism, racism, handicappism and classism, and is aware of the impact such biases have on interpersonal relations.	SA A NO D SD	P I J S	
F. Acquires knowledge about the relationships between human beings and social environments, understands some of the effects of these relationships, and makes judgments about the consequences of these relationships.			

STEP 1	STEP 2	STEP 3	STEP 4			
(Knowledge Continued)	Essential for a K-12 Social Studies Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.			
			P	I	J	S
1. Acquires knowledge about basic human interaction concepts such as victimization, stereotyping, prejudice, discrimination, assimilation, ethnocentrism, migration-immigration, racism, sexism, values, etc.	SA A NO D SD	P I J S				
2. Identifies the rights, duties and responsibilities of members of a pluralistic society.	SA A NO D SD	P I J S				
3. Recognizes the forces operating in interpersonal interactions and how these forces affect behavior of persons from different CULTURAL backgrounds.	SA A NO D SD	P I J S				
4. Understands all individuals have the right to select the manner and degree to which they identify with an ethnic group.	SA A NO D SD	P I J S				
G. Acquires knowledge about conflict and the impact it has on individual and group relationships, and makes value judgments about these relationships.						
1. Acquires knowledge of the origins, the causes and the effects of prejudices and discrimination against people from various CULTURAL backgrounds.	SA A NO D SD	P I J S				
2. Understands the contemporary issues and social problems confronting each group as well as the dynamic diversity of the experiences, cultures and individuals within groups.	SA A NO D SD	P I J S				
H. Identifies the characteristics of the individuals, groups, institutions and/or associations with which one identifies.	SA A NO D SD	P I J S				
I. Expresses awareness of one's goals (aspirations) and the sometimes internally conflicting and divergent goals of the groups with which one identifies.	SA A NO D SD	P I J S				
J. Expresses awareness of the relative strengths and weaknesses of oneself and the groups with which one identifies; recognizes the societal barriers that may exist; suggests ways of maximizing one's effectiveness.	SA A NO D SD	P I J S				
K. Understands the values, symbols and institutions of various cultural groups.	SA A NO D SD	P I J S				

STEP 1	STEP 2	STEP 3	STEP 4
II. Goal: K-12 Skill Uses a systematic approach(es) to analyze and make decisions regarding human activities, events and issues related to CULTURAL diversity.	Essential for a K-12 Social Studies Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.

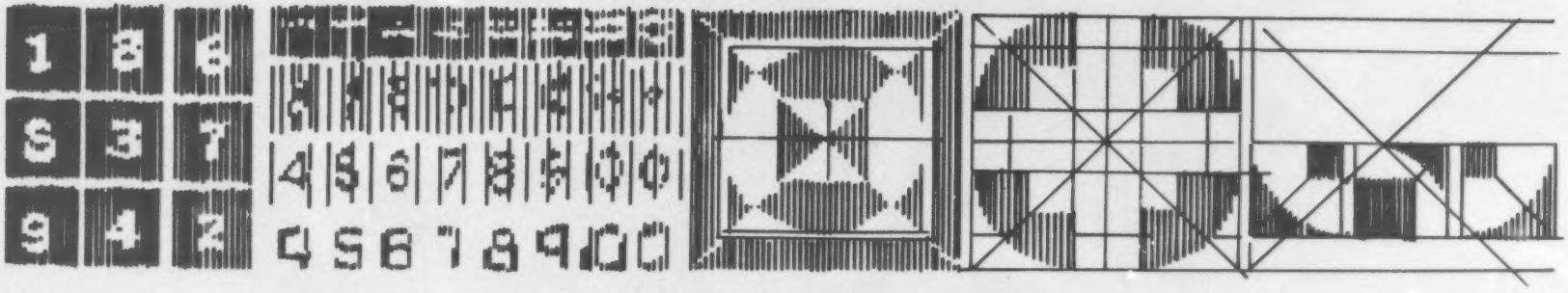
Outcomes										P	I	J	S
A. Identifies and explores the possibility of using different systematic approaches to make decisions and solve problems.													
1. Discusses interpersonal, intergroup and sex-role conflicts with all the affected parties.	SA	A	NO	D	SD	P	I	J	S				
2. Employs a range of attitudes, skills and techniques to achieve favorable experiences with people from various CULTURAL backgrounds.	SA	A	NO	D	SD	P	I	J	S				
3. Develops a variety of techniques to settle disputes involving people from various CULTURAL backgrounds.	SA	A	NO	D	SD	P	I	J	S				
B. Identifies in activities, events and issues, the central questions and hypotheses that need to be examined.													
1. Examines the lifestyles, roles and careers open to both men and women in our society.	SA	A	NO	D	SD	P	I	J	S				
2. Gathers data related to specific individuals and groups involved in the issue.	SA	A	NO	D	SD	P	I	J	S				
C. Identifies and locates sources of information and evaluates the reliability and relevance of these sources.													
1. Develops the ability to research and report on issues related to CULTURAL diversity.	SA	A	NO	D	SD	P	I	J	S				
2. Identifies bias in materials presented to him/her in school and through the media.	SA	A	NO	D	SD	P	I	J	S				
D. Demonstrates ability to use reliable sources of information.													
1. Analyzes primary and secondary source materials.	SA	A	NO	D	SD	P	I	J	S				
2. Gathers sources from individuals within the group and outside the group.	SA	A	NO	D	SD	P	I	J	S				
E. Organizes, analyzes, interprets and synthesizes information obtained from various sources.													
1. Demonstrates the ability to present to others, aspects of his/her CULTURAL heritage and the heritage of others.	SA	A	NO	D	SD	P	I	J	S				

STEP 1 (Skill Continued)	STEP 2 Essential for a K-12 Social Studies Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	STEP 3 If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	STEP 4 Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained. P I J S
2. Differentiates between ideals and realities relative to CULTURAL diversity.	SA A NO D SD	P I J S	
F. Uses summarized information to test and validate hypotheses, draw conclusions, offer actions to address problems, clarify issues or make predictions.			
1. Actively engages in activities to combat sexism, racism, ageism, classism, elitism, etc.	SA A NO D SD	P I J S	
2. Identifies the effect of conclusions and predictions of individuals and groups involved in the problem.	SA A NO D SD	P I J S	
G. Appraises judgments and values when choosing a course of action.			
1. Examines one's basic values and the extent to which one's actions are consistent with those values.	SA A NO D SD	P I J S	
2. Relates to other persons as individuals without the negative overtones of group or individual stereotypes.	SA A NO D SD	P I J S	
3. Gives and accepts criticism across racial, ethnic, CULTURAL, social and economic lines.	SA A NO D SD	P I J S	
H. Participates in meaningful group interactions with individuals from different CULTURAL backgrounds.			
1. Listens to individuals/groups from different CULTURAL backgrounds.	SA A NO D SD	P I J S	
2. Identifies ways to communicate effectively with individuals from different CULTURAL backgrounds.	SA A NO D SD	P I J S	
3. Participates within several ethnic, racial and religious environments and appreciates the values, symbols and institutions of various CULTURAL groups.	SA A NO D SD	P I J S	

STEP 1	STEP 2	STEP 3	STEP 4
III. Goal: K-12 Attitude Expresses an openness and willingness to explore, accept and/or act upon one's feelings, intuitions, attitudes and values as legitimate influences of human behavior that cover a range of CULTURAL backgrounds.	Essential for a K-12 Social Studies Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.

Outcomes				P	I	J	S
A. Examines own beliefs and values and the relationship between these behaviors.	SA A NO D SD	P I J S					
B. Accepts uncertainty and ambiguity in human activities, events and issues.	SA A NO D SD	P I J S					
C. Interacts positively with individuals of all CULTURAL diversities, when presented with such opportunities.	SA A NO D SD	P I J S					
D. Respects the rights of others to behave in humanistic ways congruent with their value systems.	SA A NO D SD	P I J S					
E. Expresses sensitivity and appreciation for CULTURAL diversity.	SA A NO D SD	P I J S					
F. Demonstrates a commitment to individual and group rights and acts in support of equal opportunity.	SA A NO D SD	P I J S					
G. Demonstrates willingness to act in support of open and equal opportunity, and explains why this is important.	SA A NO D SD	P I J S					
H. Acts to combat racism, sexism, classism, ageism and handicappism.	SA A NO D SD	P I J S					
I. Develops a positive self-concept with respect to sex and ethnicity.	SA A NO D SD	P I J S					
J. Exhibits empathy toward the issues, concerns and problems of different CULTURAL groups.	SA A NO D SD	P I J S					

SECTION B



Mathematics Goals and Outcomes

STEP 1	STEP 2	STEP 3	STEP 4
I. Goal: K-12 Knowledge Develops the knowledge and understanding of mathematics necessary to function every day in a diverse society.	Essential for a K-12 Mathematics Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.

Outcomes										P	I	J	S
A. Understands different scales for valuing money and different counting systems developed by various cultures.	SA	A	NO	D	SD	P	I	J	S				
B. Recognizes that spatial recognition is related to CULTURAL* experiences.	SA	A	NO	D	SD	P	I	J	S				
C. Understands that different measurement systems are a result of national, scientific and CULTURAL history and needs.	SA	A	NO	D	SD	P	I	J	S				
D. Understands the origin of algebraic concepts (math history).	SA	A	NO	D	SD	P	I	J	S				
E. Demonstrates a knowledge of the origin and CULTURAL circumstances under which the above concepts were hypothesized and/or discovered.	SA	A	NO	D	SD	P	I	J	S				
F. Recognizes the use of probability and statistics in different cultures and careers.	SA	A	NO	D	SD	P	I	J	S				
G. Recognizes that calculators and computers are the products of a technological society, how the machines influence work and the impact the machines have on society.	SA	A	NO	D	SD	P	I	J	S				
H. Identifies contributions made by all CULTURAL groups to the field of mathematics.	SA	A	NO	D	SD	P	I	J	S				
I. Understands the variety of careers which use mathematical knowledge, skills and attitudes.	SA	A	NO	D	SD	P	I	J	S				
J. Understands the contemporary issues and social problems confronting each group, the dynamic diversity of the experiences, cultures and individuals within groups and constantly is aware that mathematics application may contribute to solving these problems.	SA	A	NO	D	SD	P	I	J	S				
K. Understands that different cultures have placed varying degrees of value on mathematics and have applied math concepts in different ways.	SA	A	NO	D	SD	P	I	J	S				

*CULTURAL background is used throughout this activity to refer to differences in race, ethnicity, sex, religion, social and economic background, age and physical and mental abilities.

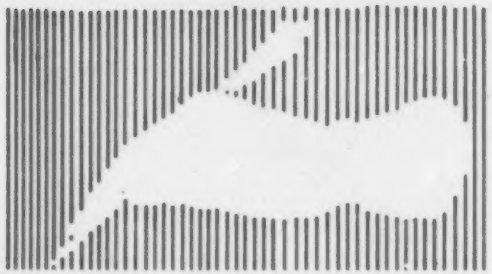
STEP 1	STEP 2	STEP 3	STEP 4
II. Goal: K-12 Skill Applies mathematical concepts which will enable the student to relate concepts to CULTURAL experiences.	Essential for a K-12 Mathematics Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.

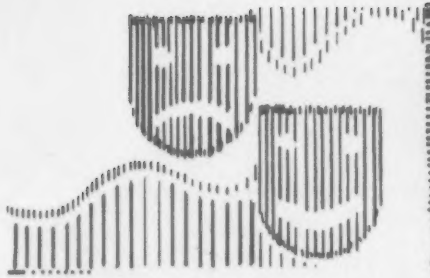
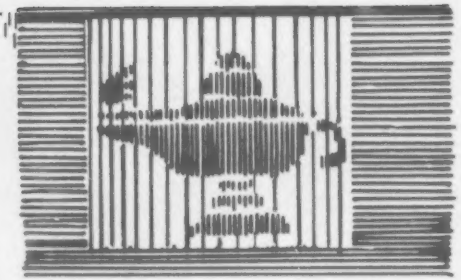
Outcomes										P	I	J	S
A. Formulates key questions in mathematics relating to ethnic and CULTURAL experiences (immigration, voting).	SA	A	NO	D	SD	P	I	J	S				
B. Analyzes and conceptualizes problems based on CULTURAL experiences or diversity.	SA	A	NO	D	SD	P	I	J	S				
C. Defines problems and goals by applying the process to concerns related to community, national, local and CULTURAL perspectives.	SA	A	NO	D	SD	P	I	J	S				
D. Discovers patterns and similarities by associating the skills with human patterns and similarities.	SA	A	NO	D	SD	P	I	J	S				
E. Transfers concepts and applies strategies through practice of the skills in addressing problems from various perspectives (farming, athletics, construction).	SA	A	NO	D	SD	P	I	J	S				
F. Applies graphing skills by using comparative data concerning experiences of various CULTURAL and groups.	SA	A	NO	D	SD	P	I	J	S				
G. Demonstrates the skills of synthesis by recognizing and formulating problems based on community or neighborhood needs.	SA	A	NO	D	SD	P	I	J	S				
H. Identifies stereotypes, distortions, and omissions in materials presented to him/her in school and through media related to contributions and participation of members of ethnic/racial groups and women in the area of mathematics.	SA	A	NO	D	SD	P	I	J	S				
I. Describes historical development of calendar/time systems across cultures.	SA	A	NO	D	SD	P	I	J	S				
J. Demonstrates how data can be presented from culturally different perspectives, such as sociograms, ethnic counts and collection of data for social, historical and economic reasons which affect individuals and groups.	SA	A	NO	D	SD	P	I	J	S				
K. Compares and contrasts diversity and identifies interrelationships in the applications of mathematics which have occurred across cultures.	SA	A	NO	D	SD	P	I	J	S				

STEP 1	STEP 2	STEP 3	STEP 4
(Skill Continued)	Essential for a K-12 Mathematics Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.
			P I J S
L. Applies personal/social mathematical concepts such as congruence, parallelism, similarities, related parts and parts of a whole to individuals and groups of various CULTURAL groups.	SA A NO D SD	P I J S	

STEP 1	STEP 2	STEP 3	STEP 4
III. Goal: K-12 Attitude Develops a positive attitude toward mathematics which results in sustained involvement in mathematical studies.	Essential for a K-12 Social Studies Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.
			P I J S
Outcomes			
A. Demonstrates self-confidence and competence in using mathematics in a wide range of success-oriented activities.	SA A NO D SD	P I J S	
B. Appreciates the ability to research and report on the achievements and contributions to the field of mathematics and technology made by all groups including ethnic minorities, women and other persons historically excluded from textbooks and encyclopedias.	SA A NO D SD	P I J S	
C. Values the contributions of individuals from various cultures to the field of mathematics.	SA A NO D SD	P I J S	
D. Values the impact of mathematical systems upon various cultures.	SA A NO D SD	P I J S	
E. Values the various social, economic and historical applications of mathematics across cultures.	SA A NO D SD	P I J S	

SECTION C



Language Arts Goals and Outcomes

STEP 1	STEP 2	STEP 3	STEP 4			
I. Goal: K-12 Knowledge Understands the structure of the English language, the nature and conventions of American-edited English and other communications systems, the relationships between language and culture and U.S. and word literature, including the contributions in the language arts made by individuals from different CULTURAL* backgrounds.	Essential for a K-12 Language Arts Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.			
Outcomes			P	I	J	S
A. Demonstrates a knowledge of English.						
1. Knows the conventions, mechanics and syntax of the English language.	SA A NO D SD	P I J S				
2. Understands that differences exist in the conventions, mechanics and syntax of the English language.	SA A NO D SD	P I J S				
3. Knows those aspects of language that are offensive to persons of diverse groups.	SA A NO D SD	P I J S				
4. Knows the appropriateness of different language styles in various situations and contexts.	SA A NO D SD	P I J S				
5. Recognizes the variety of English dialects reflecting social, CULTURAL and regional influences.	SA A NO D SD	P I J S				
6. Knows that racism and sexism are inherent in the English language.	SA A NO D SD	P I J S				
B. Understands the nature of communication systems.						
1. Understands that many forms of human communication exist in addition to language.	SA A NO D SD	P I J S				
2. Knows situational types of language used in occupational, social and CULTURAL settings.	SA A NO D SD	P I J S				
3. Identifies similarities and differences of communication systems within and between individuals and groups.	SA A NO D SD	P I J S				
4. Knows the uses of language by institutions such as the media, commerce and government.	SA A NO D SD	P I J S				
5. Demonstrates a knowledge of verbal and nonverbal communications that may be offensive to other individuals or groups.	SA A NO D SD	P I J S				
6. Recognizes that all languages are systematic and patterned.	SA A NO D SD	P I J S				

*CULTURAL background is used throughout this activity to refer to differences in race, ethnicity, sex, religion, social and economic background, age and physical and mental abilities.

STEP 1	STEP 2	STEP 3	STEP 4			
(Knowledge Continued)	Essential for a K-12 Language Arts Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.			
			P	I	J	S
7. Becomes aware of the power of words and images, and the impact that various media have on users and viewers in developing perceptions of individuals and groups.	SA A NO D SD	P I J S				
C. Demonstrates a knowledge of literature.						
1. Acquires knowledge of literary contributions, both historical and modern, of men and women from different CULTURAL backgrounds.	SA A NO D SD	P I J S				
2. Understands literature which reflects or provides insights into the cultures and experiences resulting from human diversity.	SA A NO D SD	P I J S				
3. Understands the elements of literary techniques and forms, including those which have been developed within various CULTURAL backgrounds.	SA A NO D SD	P I J S				

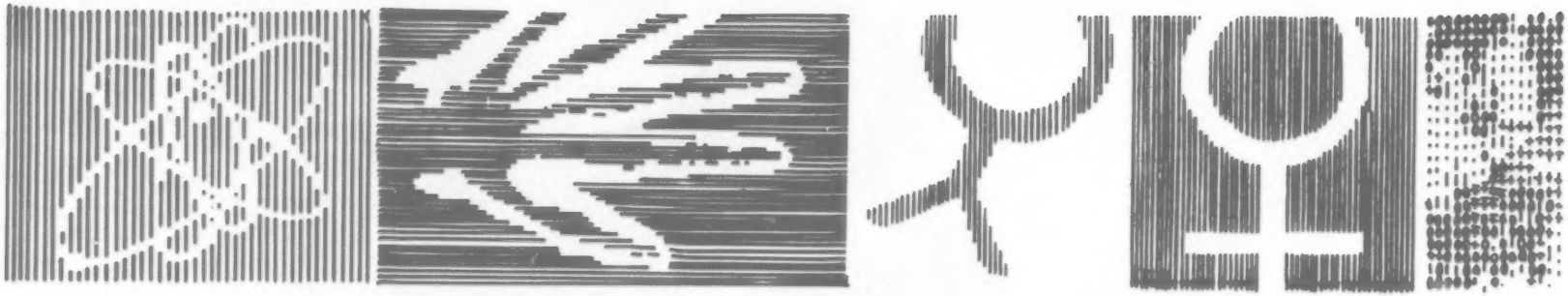
STEP 1	STEP 2	STEP 3	STEP 4			
II. Goal: K-12 Skill Transmits, receives, analyzes and uses communication effectively and sensitively, constantly considering implications for individuals from various CULTURAL backgrounds.	Essential for a K-12 Language Arts Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.			
			P	I	J	S
Outcomes						
A. Demonstrates ability to express one's self effectively with individuals from different CULTURAL backgrounds.						
1. Expresses one's self effectively by using nonsexist and nonracist oral and written communication.	SA A NO D SD	P I J S				

STEP 1	STEP 2	STEP 3	STEP 4			
(Skill Continued)	Essential for a K-12 Language Arts Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.			
			P	I	J	S
2. Masters the conventions, mechanics and syntax of written and oral communication.	SA A NO D SD	P I J S				
3. Uses a variety of written and oral forms appropriate to various situations, including cross-cultural situations.	SA A NO D SD	P I J S				
B. Demonstrates receptivity to individuals from diverse CULTURAL backgrounds.						
1. Listens and observes effectively.	SA A NO D SD	P I J S				
2. Recognizes stereotypes in communication, particularly those applying to men and women of various CULTURAL backgrounds.	SA A NO D SD	P I J S				
3. Identifies words and their meanings through vocabulary development.	SA A NO D SD	P I J S				
C. Analyzes communication of individuals from diverse CULTURAL backgrounds.						
1. Analyzes visual, oral and written communications taking into consideration CULTURAL factors.	SA A NO D SD	P I J S				
2. Identifies perspectives and biases in written, oral and visual communications.	SA A NO D SD	P I J S				
3. Understands the relationship between culture and language.	SA A NO D SD	P I J S				
4. Differentiates between fact, opinion and interpretative oral, written and visual communications.	SA A NO D SD	P I J S				
5. Identifies fallacies and inconsistencies in written, oral and visual communications.	SA A NO D SD	P I J S				
6. Analyzes the potential and actual influence of the media on own beliefs and attitudes.	SA A NO D SD	P I J S				
7. Identifies the potential influence of the media on beliefs and attitudes of others, particularly their portrayal of men and women of diverse CULTURAL backgrounds.	SA A NO D SD	P I J S				

STEP 1 (Skill Continued)	STEP 2 Essential for a K-12 Language Arts Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	STEP 3 If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	STEP 4 Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.
			P I J S
8. Compares different media by analyzing various treatments of CULTURAL topics.	SA A NO D SD	P I J S	
9. Uses literature as a means of identifying and analyzing one's personal and cultural values and the personal and cultural values of others.	SA A NO D SD	P I J S	
10. Analyzes interrelationships among things, ideas and events; including the interface of CULTURAL backgrounds.	SA A NO D SD	P I J S	
11. Recognizes how culture has affected one's communication system.	SA A NO D SD	P I J S	
D. Applies communication to different CULTURAL groups.			
1. Recognizes and uses a wide variety of sources, which reflect multiple perspectives, including those of men and women of various CULTURAL backgrounds.	SA A NO D SD	P I J S	
2. Uses various avenues, such as libraries, resource centers, community resources, mass media and individual interviews to identify, gather and organize data which reflect multiple perspectives.	SA A NO D SD	P I J S	
3. Develops memory skills (not rote memory) for using information effectively.	SA A NO D SD	P I J S	
4. Makes hypotheses about future behavior, including situations influenced by sex, race, ethnicity or culture and, when possible, tests out the hypotheses.	SA A NO D SD	P I J S	
5. Uses information to develop alternative approaches for dealing with personal and societal issues.	SA A NO D SD	P I J S	

STEP 1	STEP 2	STEP 3	STEP 4
III. Goal: K-12 Attitude Recognizes the validity of *all* communication systems; appreciates diversity in communications; enjoys the communication process and values clear and effective communication.	Essential for a K-12 Language Arts Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained. P I J S
Outcomes			
A. Recognizes the validity of all communication systems.			
1. Respects the systems of communication developed by various groups as effective and valid when used in appropriate situations.	SA A NO D SD	P I J S	
2. Reacts positively to communication systems other than one's own.	SA A NO D SD	P I J S	
B. Appreciates diversity in communications.			
1. Appreciates the literary contributions of men and women of various CULTURAL backgrounds.	SA A NO D SD	P I J S	
2. Respects *all* pronunciations and dialects.	SA A NO D SD	P I J S	
3. Appreciates values presented through literature which may be different from one's own.	SA A NO D SD	P I J S	
C. Enjoys the communication process.			
1. Enjoys listening, speaking, reading and writing.	SA A NO D SD	P I J S	
2. Feels confident and competent in communication, including cross-CULTURAL communications.	SA A NO D SD	P I J S	
D. Values the importance of clear and effective communication			
1. Perceives the value of using standard English speech and/or writing in various community or social situations.	SA A NO D SD	P I J S	
2. Rejects and avoids stereotyping.	SA A NO D SD	P I J S	
3. Appreciates the importance of developing effective, sensitive communication skills across CULTURAL lines.	SA A NO D SD	P I J S	

SECTION D



Science Goals and Outcomes

STEP 1	STEP 2	STEP 3	STEP 4			
I. Goal: K-12 Knowledge Understands the processes, products and applications of science and encourages their use in interpreting the environment.	Essential for a K-12 Science Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.			
			P	I	J	S
Outcomes						
A. Demonstrates a knowledge of the science contributions of women and men from various CULTURAL* backgrounds.	SA A NO D SD	P I J S				
B. Knows of genetically linked ethnic diseases that originated from an environmental selection process and not from a pathological defect of the ethnic groups.	SA A NO D SD	P I J S				
C. Demonstrates knowledge of the contributions to science and technology made by men and women of various CULTURAL groups.	SA A NO D SD	P I J S				
D. Acquires knowledge of the ways in which attitudes, thinking processes and skills can be coupled with scientific information and used in personal decision-making.	SA A NO D SD	P I J S				
E. Describes the interdependence of groups within the total society while simultaneously identifying positive and unique characteristics of CULTURAL groups.	SA A NO D SD	P I J S				
F. Identifies ways in which science could be used for the betterment of people from varying CULTURAL backgrounds.	SA A NO D SD	P I J S				
G. Reports information from CULTURAL groups honestly and objectively, even when data conflict with own ideas.	SA A NO D SD	P I J S				
H. Identifies individuals from different CULTURAL backgrounds in various science-related careers.	SA A NO D SD	P I J S				
I. Understands the CULTURAL differences of health and nutrition (e.g. foods, hair care, skin care).	SA A NO D SD	P I J S				
J. Understands the biological facts concerning skin color of CULTURAL individuals and groups.	SA A NO D SD	P I J S				
K. Acquires information on the physical, intellectual and personality differences and similarities of individuals from ditferent CULTURAL groups.	SA A NO D SD	P I J S				

*CULTURAL background is used throughout this activity to refer to differences in race, ethnicity, sex, religion, social and economic background, age and physical and mental abilities.

STEP 1	STEP 2	STEP 3	STEP 4
II. Goal: K-12 Skill Develops and applies rational and creative thinking processes to reduce and eliminate prejudices, stereotypes, negative behaviors and feelings toward other CULTURAL groups.	Essential for a K-12 Science Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.

Outcomes										P	I	J	S
A. Generates scientific data by observing, recalling, recognizing, identifying and measuring; the experimental data can reflect a multicultural/nonsexist perspective.	SA	A	NO	D	SD	P	I	J	S				
B. Organizes data by comparing, ordering, classifying and relating.	SA	A	NO	D	SD	P	I	J	S				
C. Uses problem-solving processes in cooperation with people from different CULTURAL groups.	SA	A	NO	D	SD	P	I	J	S				
D. Applies and evaluates data and generates theories by hypothesizing, predicting, inferring, generalizing, theorizing, explaining, justifying and judging based on scientific knowledge and humanistic principles.	SA	A	NO	D	SD	P	I	J	S				
E. Performs a variety of scientific tasks in conjunction with males and females of diverse CULTURAL groups.	SA	A	NO	D	SD	P	I	J	S				
F. Uses data-generating and theory-building processes in a cyclical manner to analyze a problem; the problem may reflect the contemporary issues and social problems which scientific applications can create for various CULTURAL groups.	SA	A	NO	D	SD	P	I	J	S				
G. Cooperates with males and females of diverse CULTURAL groups to assemble and use complex laboratory apparatus, tools and materials.	SA	A	NO	D	SD	P	I	J	S				
H. Gives due attention to prevent accident to protect self and all others from harm.	SA	A	NO	D	SD	P	I	J	S				
I. Learns proper techniques for handling and caring for living organisms.	SA	A	NO	D	SD	P	I	J	S				
J. Makes purposeful, objective observations of things and events in gathering the descriptive and quantitative information needed for developing or testing inferences and hypotheses concerning scientific problems and issues, including those which may affect CULTURAL groups.	SA	A	NO	D	SD	P	I	J	S				

STEP 1 (Skill Continued)	STEP 2 Essential for a K-12 Science Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	STEP 3 If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	STEP 4 Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained. P I J S
K. Identifies objects and events and expresses their relationship to other CULTURAL groups.	SA A NO D SD	P I J S	
L. Relates color, form, shape, arrangement and design of objects in the environment to different CULTURAL groups.	SA A NO D SD	P I J S	
M. Uses scientific skills and knowledge to better understand various CULTURAL groups.	SA A NO D SD	P I J S	
N. Searches for reports and evidences of order, symmetry and asymmetry as ways to become more familiar with different CULTURAL groups.	SA A NO D SD	P I J S	
O. Compares and examines the viewpoints of different CULTURAL groups on science/technology-related social issues.	SA A NO D SD	P I J S	
P. Tests concepts relative to stereotypes, prejudices and myths.	SA A NO D SD	P I J S	
Q. Applies science problem-solving techniques in multicultural/non-sexist situations.	SA A NO D SD	P I J S	
R. Reads materials, biographies and stories about scientists that represent different CULTURAL backgrounds.	SA A NO D SD	P I J S	
S. Relates the importance of many people in science-related careers from different CULTURAL backgrounds.	SA A NO D SD	P I J S	
T. Makes a responsible and realistic decision about the pursuit of a science-related career without being influenced by CULTURAL stereotypes, myths or prejudices.	SA A NO D SD	P I J S	

STEP 1	STEP 2	STEP 3	STEP 4
III. Goal: K-12 Attitude Develops values, aspirations and attitudes that promote all individuals' personal involvement with the environment in a CULTURALLY diverse society.	Essential for a K-12 Science Program? (Strongly Agree, Agree, No Opinion, Disagree, Strongly Disagree)	If essential, at which grade level can it be introduced? (Primary, Intermediate, Junior High, Senior High)	Place an I in the appropriate column to indicate where the outcome is to be introduced. Then, place an R in the column and an M in the column to indicate where the outcome will be reinforced and maintained.
Outcomes			P I j S
A. Shows concern for the safety and well-being of self and all people.	SA A NO D SD	P I J S	
B. Expresses opinions on social issues (e.g. land use, alternative energy sources) using scientific knowledge that may relate to CULTURAL groups.	SA A NO D SD	P I J S	
C. Accepts and responds objectively to criticism and information about one's own CULTURAL background.	SA A NO D SD	P I J S	
D. Values the abilities, interests and preparation of different individuals for their choice of career.	SA A NO D SD	P I J S	
E. Gathers information and reports on the contributions of other cultures to the scientific world.	SA A NO D SD	P I J S	
F. Expresses belief that CULTURAL background should not constitute a barrier to the study of science.	SA A NO D SD	P I J S	
G. Learns sensitivity to human life, values and privacy in the design of scientific experiments.	SA A NO D SD	P I J S	
H. Communicates with males and females of all CULTURAL groups in a consistent manner and facilitates the learning of all listeners and readers.	SA A NO D SD	P I J S	

ACTIVITY 3

Assessing Content for a Multicultural/Nonsexist Program

Background Information

Once your outcomes have been sequenced, course content must be identified to accomplish those outcomes. In some cases, the units and courses in a specific grade level may not be appropriate to the newly sequenced outcomes. In that case, a decision must be made to: (1) select appropriate course content which accommodates the outcomes, (2) infuse MC/NS content into the course at the appropriate grade level or (3) resequence, as a last resort, the outcomes to accommodate the courses.

Preferably, once the outcomes have been sequenced, course content should be selected to accommodate them. However, many districts may not be able to change course scheduling. Every attempt should be made to select appropriate course content for the sequenced outcomes. If this is not possible, then the courses should infuse MC/NS content to accommodate the outcome sequenced at that level. At this stage of planning, outcomes should not be resequenced simply to accommodate course content.

Procedure

In the last activity, you identified and clustered outcomes. The next activity will determine the extent to which your current course content achieves these outcomes.

1. Turn to the four worksheets at the end of this activity. Using the outcomes clustered for the primary level in the previous activity, refer to Worksheet A and list each of these outcomes in an individual box in column 1. Follow the same process for plotting outcomes to be introduced at the intermediate, junior high school and senior high school levels using the appropriate worksheets. Enough worksheets should be duplicated to accommodate all outcomes for each level.

2. Copy responses given in step 4 of Activity II in column 2 for each outcome.

3. In column 3, identify the unit(s) and/or course(s) which are being taught (at each level P-I-J-S) which accommodate that specific outcome.

4. In column 4, list prospective units and/or courses which may be developed to accommodate a specific outcome. If a unit and/or a course currently is being taught at a given grade level and accommodates the outcomes (as stated in column 3), there is no need to reorganize your sequenced outcomes. If no such unit and/or course exists, the committee should propose curriculum to address that outcome. (The committee should be specific when assessing course content; note if the curriculum is a specific unit or a course. The committee should identify how specific they want to be.)

Examples of completed worksheets:

Primary Level Outcomes

Outcome	How is the primary outcome sequenced? P	I	J	S	What units currently taught in the curriculum will be used to address the outcomes at each level? Use either unit or course.	What unit or course needs to be developed?
States observed and/or known differences in all or certain aspects of two or more individuals and groups.	I	R	R	M	Unit—Self P. *Course—Family* I. *None* Unit—Asian Studies J. *Course—World Cultures* Unit—Groups S. *Course—Sociology*	I. X Unit—Neighborhoods Course—Community

Junior High School Outcomes

Outcome	How is the outcome sequenced? J	S	What units currently taught in the curriculum will be used to address the outcomes at each level? Use either unit or course.	What unit or course needs to be developed?
Makes a single conclusion about what is probably true of a given person, thing or situation.	I	R/M	Unit—Electoral Process J. *Course—Civics* Unit—Presidency S. *Course—American Government*	

Intermediate Level Outcomes

Outcome	How is the outcome sequenced? I	J	S	What units currently taught in the curriculum will be used to address the outcomes at each level? Use either unit or course.	What unit or course needs to be developed?
Interprets the meaning of a verbal or nonverbal message.	I	R	M	Unit—Communications I. *Course—Families* J. *None* Unit—Verbal/Nonverbal Communications S. *Course—Psychology*	J. X Unit—Diversity Course—Urban Studies

The X in column 4 indicates that the current courses at a particular level do not address the outcome. Therefore, a gap exists in your program which could be eliminated either by: (1) changing the courses at the grade level or (2) developing activities to be infused in the courses' content to accommodate the outcome. We would suggest the latter.

5. When the worksheet(s) are completed, you should have a comprehensive K-12 program, listing units and courses which will accommodate each outcome as well as gaps in the program where outcomes are not being addressed. Develop activities for only those outcomes which do not have appropriate course content.

Worksheet III: A

Primary Level Outcomes

Outcomes	How is the outcome sequenced? P	I	J	S	What units currently taught in the curriculum will be used to address the outcomes at each level? Write "none," if none exist.	What unit or course needs to be developed?
					P. _____ I. _____ J. _____ S. _____	
					P. _____ I. _____ J. _____ S. _____	
					P. _____ I. _____ J. _____ S. _____	
					P. _____ I. _____ J. _____ S. _____	

*Duplicate enough worksheets to accommodate all primary level outcomes.

Worksheet III: B

Intermediate Level Outcomes

Outcomes	How is the outcome sequenced? I	J	S	What units currently taught in the curriculum will be used to address the outcomes at each level? Write "none," if none exist.	What unit or course needs to be developed?
				I. _____ J. _____ S. _____	
				I. _____ J. _____ S. _____	
				I. _____ J. _____ S. _____	
				I. _____ J. _____ S. _____	
				I. _____ J. _____ S. _____	

*Duplicate enough worksheets to accommodate all intermediate level outcomes.

Worksheet III: C

Junior High School Outcomes

Outcomes	How is the outcome sequenced? J	S	What units currently taught in the curriculum will be used to address the outcomes at each level? Write "none," if none exist.	What unit or course needs to be developed?
			J. _____ S. _____	
			J. _____ S. _____	
			J. _____ S. _____	
			J. _____ S. _____	
			J. _____ S. _____	
			J. _____ S. _____	

*Duplicate enough worksheets to accommodate all junior high school outcomes.

Worksheet III: D

Senior High School Outcomes

Outcomes	How is the outcome sequenced? S	What units currently taught in the curriculum will be used to address the outcomes at each level? Write "none," if none exist.	What unit or course needs to be developed?
		S. _____	
		S. _____	
		S. _____	
		S. _____	

*Duplicate enough worksheets to accommodate all senior high school outcomes.

ACTIVITY 4

Developing Multicultural/ Nonsexist Activities

Background Information

Only when Activity I, Activity II and Activity III are completed, should a district start to develop multicultural/nonsexist activities (Activity IV).

A comprehensive multicultural/nonsexist program should outline the knowledge, skills and attitudes to be taught at each grade level and decrease duplication of course content and perhaps skill deficiency. Once gaps in content and outcomes are identified, systematic curriculum development efforts should be undertaken. These efforts should relate directly to a specific outcome, which should relate to a specific knowledge, skill or attitude goal. A series of activities may need to be developed to accomplish a specific outcome. In some cases, depending on the outcome selected, it may take years to accomplish one outcome. By developing a multicultural/nonsexist education plan, a district can identify those outcomes which should be reinforced and maintained throughout the program.

Procedure

1. Refer to worksheets A, B, C and D of Activity III and find those outcomes which are not addressed by the current course content. Write one of these outcomes on the worksheet which follows this activity.
2. Identify the level at which the outcome is not being addressed.
3. For each level (P, I, J, S), indicate what course content and units are taught at that level. Break down the level into specific grades (P = K,1,2,3; I = 4,5,6; J = 7,8,9; S = 10,11,12).
4. Now that you have identified the gap in your program, develop activities to close the gap. One suggested strategy is to develop specific activities for infusion into current course content. Select a unit currently taught which seems appropriate for addressing the specific outcome.
5. Write specific objectives which the unit will address which will accomplish the selected outcome.
6. Develop a classroom activity to help students achieve each objective.

WORKSHEET IV:

Developing Multicultural/ Nonsexist Activities

1. Select one outcome which does not have appropriate course content. (This can be taken from Column 4 of the previous worksheets.)

   Outcome selected: _____

   _____

   _____

2. At what level is the outcome not being addressed? (Circle level or levels.) P I J S

3. Specifically, identify what course content is taught at that level. Break down the level into specific grades. (P = K,1,2,3; I = 4,5,6; J = 7,8,9; S = 10,11,12.)

Grade Level	Course Content	Units

4. Select a unit at the appropriate grade level in which the activities developed can be infused. _____

   _____

5. Identify specific objectives which the unit will address which will accommodate the outcome in line 1.

   Objective(s): _____

   _____

   _____

   _____

   _____

   _____

   _____

   _____

6. Develop a classroom activity to meet all the above-stated objectives.

Bibliography

Anderson, Lee. **Schooling and Citizenship in a Global Age: An Exploration of the Meaning and Significance of Global Education,** Bloomington, IN: Social Studies Development Center, Indiana University, 1979.

Anderson, Thomas R. **Guide to Implementing Multicultural, Nonsexist Programs in Iowa Schools,** Des Moines, IA: Iowa State Department of Public Instruction, 1976.

Ashworth, Margaret L., et al. **Shared Learning Experiences,** Wayne County Intermediate School District, 1966.

Baker, Thomas M. and John F. Reiher. **Equinox. A Model for the Natural Science Education Curriculum for the Second, Third, and Fourth Grades in the Delaware Schools,** Dover, DE: Delaware State Department of Public Instruction, 1974.

Baker, Thomas M. and John F. Reiher. **Equinox. A Model for the Natural Science Education Curriculum for the Fifth, Sixth, Seventh, and Eighth Grades in the Delaware Schools,** Dover, DE: Delaware State Department of Public Instruction, 1974.

Baker, Thomas M. and John F. Reiher. **Equinox. A Model for the Natural Science Education Curriculum for the Ninth Through Twelfth Grades in the Delaware Schools,** Dover, DE: Delaware State Department of Public Instruction, 1975.

Baptiste, Prentice H., Jr., et al. **Multicultural Teacher Education: Preparing Educators to Provide Educational Equity** (4 Volumes), Washington, D.C.: American Association of Colleges for Teacher Education, 1980.

Barr, Robert, James L. Barth, and Samuel Shermis. **The Nature of the Social Studies,** Palm Springs, CA: ETC Publications, 1978.

Becker, James and Shirley McCune. **Today's Changing Roles: An Approach to Nonsexist Teaching,** Washington, D.C.: National Foundation for the Improvement of Education, 1974.

Carle, Wayne M. **Integration: Maintaining the Momentum,** 1975.

Coffin, Gregory C. **Coping with Racial Imbalance,** 1969.

Davis, James, et al. **Planning a Social Studies Program,** Boulder, CO: Social Science Education Consortium, 1977.

"Discussion and Debate on New Proposals for the Social Studies Curriculum," **Social Education,** 44:7, Nov.-Dec. 1980.

Elan, Stanley M., ed. "Decade of Gallup Polls of Attitudes Toward Education, 1969-78," **Phi Delta Kappan,** 1978.

Evaluation Guidelines for Multicultural/ Multiracial Education, Arlington, VA: National Study of School Evaluation, 1973.

Eyster, Ira, et al. **Culture Through Concepts,** Norman, OK: Southwest Center for Human Relations Studies, 1979.

Goodlad, John, et. al. "What We Don't Know about Education: A Symposium," **Phi Delta Kappan,** 61:9: 591-658, May 1980.

A Guide for Improving Public School Practices in Human Rights, Norman, OK: College of Education, Oklahoma University, 1975.

Guttentag, Marcia and Helen Gray. **Undoing Sex Stereotypes: Research and Resources for Educators,** New York, NY: McGraw-Hill Book Co., 1976.

Hanson, Robert and Harry Silver. **Teacher Self-Assessment: Dealing with Diversity,** Moorestown, NY: Hanoon, Silver and Associates, 1978.

Harms, Norris, et al. **Project Synthesis: Final Report,** Boulder, CO: School of Education, University of Colorado, 1980.

Klassen, Frank and Donna Dollnick. **Pluralism and the American Teacher: Issues and Case Studies,** Washington, D.C.: American Association of Colleges for Teacher Education, 1977.

Kurfman, Dana G., ed. **Developing Decision-Making Skills,** Washington, D.C.: National Council for the Social Studies, 1977.

Minimal Performance Objectives for Science Education in Michigan, Lansing, MI: Michigan State Department of Education, 1974.

Multicultural, Nonsexist Education in Iowa Schools (Series: Social Studies, 1979; Art, 1980; Language Arts, 1980), Des Moines, IA: Iowa State Department of Public Instruction, 1979-80.

Planning for the Achievement of Quality Integrated Education in Desegregated Schools, A Composite Report on the Recommendations of Workshop Participants, Brooklyn, NY: New York City Board of Education, 1968.

Position Statement on Multicultural Education, Lansing, MI: Michigan State Department of Education, 1979.

Race and Equal Education Opportunity in Portland's Public Schools: A Report to the Board of Education, Multnomah School District No. 1, Portland, OR: Committee on Race and Education, Board of Education, 1964.

Rogers, Vincent. "The Social Studies Dilemma: Which Face of America Should Students See?" **Learning,** 9:3, Oct. 1980.

Schniedewind, Nancy. **Confronting Racism and Sexism: A Practical Handbook for Educators,** New Paltz, NY: Commonground Press, 1977.

Stent, Madelon D., William R. Hazard, et al. **Cultural Pluralism in Education: A Mandate for Changes,** New York, NY: Appleton-Century Crafts, 1973.

Stevens, William W., ed. **State Government and Politics in the Secondary Curriculum,** Sangamon State University, 1978.

Student Learning Objectives for Multicultural Education in the Basic Skills, Olympia, WA: State Superintendent of Public Instruction, Office of Equity in Education, 1980.

A Summary of the Vice President's Task Force on Youth Employment, Washington, D.C.: U.S. Government Printing Office, 1980.

Ten Steps for Shared Roles in Multicultural Curriculum Development, Chicago, IL: Illinois State Office of Education, Urban and Ethnic Education Section, 1978.

Vidich, Arthur J., and Charles W. McReynolds. **High School Principals Study Seminar. Final Report,** New York, NY: New School for Social Research, 1969.

Weinberg, Meyer. **Minority Students: A Research Appraisal,** Washington, D.C.: National Institute of Education, U.S. Department of HEW, 1977.

Wright, M. Francis and Kenneth Tye. "The Study of Schooling and Curriculum," **Phi Delta Kappan,** Dec. 1979.